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RAW SEQUENCE LISTING DATE: 11/19/2001
PATENT APPLICATION: US/09/987,190 TIME: 11:12:00

Input Set : A:\1422-0502P.ST25.txt
Output Set: N:\CRF3\11192001\I987190.raw

ENTERED

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      3 <110> APPLICANT: TAKESAKO, Kazutoh
      4       MIZUTANI, Shigetoshi
      5       ENDO, Masahiro
      6       KATO, Ikunoshin
      8 <120> TITLE OF INVENTION: FUNGAL ANTIGENS AND PROCESS FOR PRODUCING THE SAME
     10 <130> FILE REFERENCE: 1422-0502P
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/987,190
C--> 13 <141> CURRENT FILING DATE: 2001-11-13
     15 <150> PRIOR APPLICATION NUMBER: 09/262,856
     16 <151> PRIOR FILING DATE: 1999-03-04
     18 <160> NUMBER OF SEQ ID NOS: 15
     20 <170> SOFTWARE: PatentIn Ver. 2.0
     22 <210> SEQ ID NO: 1
     23 <211> LENGTH: 50
     24 <212> TYPE: PRT
     25 <213> ORGANISM: Candida albicans
     27 <220> FEATURE:
     28 <221> NAME/KEY: Unsure
     29 <222> LOCATION: (1)..(50)
     30 <223> OTHER INFORMATION: any Xaa = any amino acid, unknown or other
     32 <400> SEQUENCE: 1
     33 Ala Ser Thr Lys Lys Tyr Asp Val Val Val Ile Gly Gly Gly Pro Gly
     34   1               5                  10                  15
     36 Gly Tyr Val Ala Ala Ile Lys Ala Ala Gln Leu Gly Leu Asn Thr Ala
     37              20                  25                  30
W--> 39 Xaa Ile Glu Lys Arg Gly Ala Leu Gly Gly Thr Xaa Leu Asn Val Gly
     40          35                  40                  45
W--> 42 Xaa Ile
     43      50
     46 <210> SEQ ID NO: 2
     47 <211> LENGTH: 30
     48 <212> TYPE: PRT
     49 <213> ORGANISM: Candida albicans
     51 <220> FEATURE:
     52 <221> NAME/KEY: Unsure
     53 <222> LOCATION: (1)..(30)
     54 <223> OTHER INFORMATION: any Xaa = any amino acid, unknown or other
     56 <400> SEQUENCE: 2
     57 Lys Tyr Ser Leu Pro Glu Leu Asp Tyr Glu Phe Ser Ala Thr Glu Pro
     58   1               5                  10                  15
W--> 60 Tyr Ile Ser Gly Gln Ile Asn Glu Ile Xaa Tyr Thr Xaa Xaa
     61              20                  25                  30
     64 <210> SEQ ID NO: 3
     65 <211> LENGTH: 31
     66 <212> TYPE: PRT
     67 <213> ORGANISM: Candida albicans
     69 <400> SEQUENCE: 3
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RAW SEQUENCE LISTING DATE: 11/19/2001
PATENT APPLICATION: US/09/987,190 TIME: 11:12:00

Input Set : A:\1422-0502P.ST25.txt
Output Set: N:\CRF3\11192001\I987190.raw

```
70 Ala Ser Ala Glu Pro Thr Leu Lys Gln Arg Leu Glu Glu Ile Leu Pro
71   1               5                  10                  15
73 Ala Lys Ala Glu Glu Val Lys Gln Phe Lys Lys Glu His Gly Lys
74              20                  25                  30
77 <210> SEQ ID NO: 4
78 <211> LENGTH: 30
79 <212> TYPE: PRT
80 <213> ORGANISM: Candida albicans
82 <400> SEQUENCE: 4
83 Lys Phe Thr Asp Asp Tyr Tyr Ser Lys Ile Ala Asp Asp Tyr Ile Glu
84   1               5                  10                  15
86 Phe Thr Tyr Lys Asn Pro Thr Ile Tyr His Val Val Asn Phe
87              20                  25                  30
90 <210> SEQ ID NO: 5
91 <211> LENGTH: 491
92 <212> TYPE: PRT
93 <213> ORGANISM: Candida albicans
95 <400> SEQUENCE: 5
96 Met Leu Arg Ser Phe Lys Ser Ile Pro Ala Asn Gly Lys Leu Ala Gln
97   1               5                  10                  15
99 Phe Val Arg Tyr Ala Ser Thr Lys Lys Tyr Asp Val Val Val Ile Gly
100             20                  25                  30
102 Gly Gly Pro Gly Gly Tyr Val Ala Ala Ile Lys Ala Ala Gln Leu Gly
103         35                  40                  45
105 Leu Asn Thr Ala Cys Ile Glu Lys Arg Gly Ala Leu Gly Gly Thr Cys
106     50                  55                  60
108 Leu Asn Val Gly Cys Ile Pro Ser Lys Ser Leu Leu Asn Asn Ser His
109 65                  70                  75                  80
111 Leu Leu His Gln Ile Gln His Glu Ala Lys Glu Arg Gly Ile Ser Ile
112                 85                  90                  95
114 Gln Gly Glu Val Gly Val Asp Phe Pro Lys Leu Met Ala Ala Lys Glu
115             100                 105                 110
117 Lys Ala Val Lys Gln Leu Thr Gly Gly Ile Glu Met Leu Phe Lys Lys
118         115                 120                 125
120 Asn Lys Val Asp Tyr Leu Lys Gly Ala Gly Ser Phe Val Asn Glu Lys
121     130                 135                 140
123 Thr Val Lys Val Thr Pro Ile Asp Gly Ser Glu Ala Gln Glu Val Glu
124 145                 150                 155                 160
126 Ala Asp His Ile Ile Val Ala Thr Gly Ser Glu Pro Thr Pro Phe Pro
127                 165                 170                 175
129 Gly Ile Glu Ile Asp Glu Glu Arg Ile Val Thr Ser Thr Gly Ile Leu
130             180                 185                 190
132 Ser Leu Lys Glu Val Pro Glu Arg Leu Ala Ile Ile Gly Gly Gly Ile
133         195                 200                 205
135 Ile Gly Leu Glu Met Ala Ser Val Tyr Ala Arg Leu Gly Ser Lys Val
136     210                 215                 220
138 Thr Val Ile Glu Phe Gln Asn Ala Ile Gly Ala Gly Met Asp Ala Glu
139 225                 230                 235                 240
141 Val Ala Lys Gln Ser Gln Lys Leu Leu Ala Lys Gln Gly Leu Asp Phe
```

RAW SEQUENCE LISTING DATE: 11/19/2001
PATENT APPLICATION: US/09/987,190 TIME: 11:12:00

Input Set : A:\1422-0502P.ST25.txt
Output Set: N:\CRF3\11192001\I987190.raw

```
                  245                 250                 255
Lys Leu Gly Thr Lys Val Val Lys Gly Glu Arg Asp Gly Glu Val Val
            260                 265                 270
Lys Ile Glu Val Glu Asp Val Lys Ser Gly Lys Lys Ser Asp Leu Glu
        275                 280                 285
Ala Asp Val Leu Leu Val Ala Ile Gly Arg Arg Pro Phe Thr Glu Gly
    290                 295                 300
Leu Asn Phe Glu Ala Ile Gly Leu Glu Lys Asp Asn Lys Gly Arg Leu
305                 310                 315                 320
Ile Ile Asp Asp Gln Phe Lys Thr Lys His Asp His Ile Arg Val Ile
                325                 330                 335
Gly Asp Val Thr Phe Gly Pro Met Leu Ala His Lys Ala Glu Glu Glu
            340                 345                 350
Gly Ile Ala Ala Ala Glu Tyr Ile Lys Lys Gly His Gly His Val Asn
        355                 360                 365
Tyr Ala Asn Ile Pro Ser Val Met Tyr Thr His Pro Glu Val Ala Trp
    370                 375                 380
Val Gly Leu Asn Glu Glu Gln Leu Lys Glu Gln Gly Ile Lys Tyr Lys
385                 390                 395                 400
Val Gly Lys Phe Pro Phe Ile Ala Asn Ser Arg Ala Lys Thr Asn Met
                405                 410                 415
Asp Thr Asp Gly Phe Val Lys Phe Ile Ala Asp Ala Glu Thr Gln Arg
            420                 425                 430
Val Leu Gly Val His Ile Ile Gly Pro Asn Ala Gly Glu Met Ile Ala
        435                 440                 445
Glu Ala Gly Leu Ala Leu Glu Tyr Gly Ala Ser Thr Glu Asp Ile Ser
    450                 455                 460
Arg Thr Cys His Ala His Pro Thr Leu Ser Glu Ala Phe Lys Glu Ala
465                 470                 475                 480
Ala Leu Ala Thr Phe Asp Lys Pro Ile Asn Phe
                485                 490
<210> SEQ ID NO: 6
<211> LENGTH: 188
<212> TYPE: PRT
<213> ORGANISM: Candida albicans
<400> SEQUENCE: 6
Ala Thr Glu Pro Tyr Ile Thr Gly Gln Met Asn Glu Ile His Tyr Thr
 1               5                  10                  15
Lys His His Gln Thr Tyr Val Asn Asn Leu Asn Ala Ser Ile Glu Gln
            20                  25                  30
Ala Val Glu Ala Lys Ser Lys Gly Glu Val Lys Lys Leu Val Ala Leu
        35                  40                  45
Gln Lys Ala Ile Asn Phe Asn Gly Gly Gly Tyr Leu Asn His Cys Leu
    50                  55                  60
Trp Trp Lys Asn Leu Ala Pro Val Ser His Gly Gly Gly Gln Pro Pro
65                  70                  75                  80
Ser Glu Asp Ser Lys Leu Gly Lys Gln Ile Val Lys Gln Phe Gly Ser
                85                  90                  95
Leu Asp Lys Leu Ile Glu Ile Thr Asn Gly Lys Leu Ala Gly Ile Gln
```

RAW SEQUENCE LISTING DATE: 11/19/2001
PATENT APPLICATION: US/09/987,190 TIME: 11:12:00

Input Set : A:\1422-0502P.ST25.txt
Output Set: N:\CRF3\11192001\I987190.raw

```
215             100                 105                 110
217 Gly Ser Gly Trp Ala Phe Ile Val Lys Asn Lys Ala Asn Gly Asp Thr
218         115                 120                 125
220 Ile Asp Val Ile Thr Thr Ala Asn Gln Asp Thr Val Thr Asp Leu Asn
221     130                 135                 140
223 Leu Val Pro Leu Ile Ala Ile Asp Ala Trp Lys His Ala Tyr Tyr Leu
224 145                 150                 155                 160
226 Gln Tyr Gln Asn Val Lys Ala Asp Tyr Phe Lys Asn Leu Trp His Val
227                 165                 170                 175
229 Ile Asn Trp Lys Glu Ala Glu Arg Arg Phe Glu Phe
230             180                 185
233 <210> SEQ ID NO: 7
234 <211> LENGTH: 1750
235 <212> TYPE: DNA
236 <213> ORGANISM: Candida albicans
238 <400> SEQUENCE: 7
239 ctcagagaga ccggactaaa gattctataa atattctttc tttctgttca cattatatat 60
240 tcttctcaac aaatgttaag atcattcaaa tctattccag ccaatggaaa attggcccag 120
241 tttgttagat atgcatcaac caagaaatac gacgttgttg tcattggtgg tggaccaggt 180
242 gggtacgttg ctgccatcaa ggccgctcaa ttaggattaa acactgcctg tattgaaaaa 240
243 agaggtgcat tgggtggtac ttgtttgaat gttggttgta tcccatccaa atctttattg 300
244 aacaactccc atttattaca ccaaatccaa cacgaagcca aagaaagagg tatttccatc 360
245 caaggtgaag ttggcgttga ttttccaaaa ttgatggctg ccaaggaaaa agccgtcaaa 420
246 caattgaccg gtggtattga aatgttgttc aaaaagaaca aggttgacta cttgaaagga 480
247 gccggttctt ttgttaacga aaaaaccgtc aaagtcactc caattgacgg cagcgaagca 540
248 caagaagttg aagccgacca catcatcgtt gctactgggt ctgaaccaac tccattccca 600
249 ggtattgaaa tagatgaaga aagaattgtc acttctactg gtattttatc attgaaagaa 660
250 gtaccagaaa gattagccat cattggtgga ggtatcattg gtttggaaat ggcttccgtt 720
251 tacgcaagat tgggctctaa agtcactgtt atcgaattcc agaacgctat tggtgccggt 780
252 atggatgctg aagttgctaa acaatctcaa aaattattgg ccaaacaagg tttggacttc 840
253 aaattaggta caaaggttgt taaaggtgaa agagatggtg aagtggtcaa gatcgaagtt 900
254 gaagatgtca aatccggtaa aaaatctgac cttgaagccg atgtcttgtt ggttgccatt 960
255 ggtagaagac catttactga aggtttgaac tttgaagcca ttggtttaga gaaagataac 1020
256 aagggaagat tgattattga cgaccaattc aagactaaac atgaccacat cagagttatt 1080
257 ggggatgtca cattcggtcc tatgttggcc cacaaggctg aagaagaagg tatcgctgct 1140
258 gctgaataca tcaagaaagg tcacggtcat gtaaactatg ctaacatccc ttctgttatg 1200
259 tatactcacc cagaagttgc ctgggttggt ttaaacgaag aacaattgaa agaacaaggc 1260
260 atcaaataca aagtaggtaa attcccattc attgccaact ccagagctaa aaccaacatg 1320
261 gacactgatg gtttcgtgaa attcattgct gatgccgaaa cccaaagagt gttgggtgtc 1380
262 cacattattg gtccaaatgc aggtgaaatg attgctgaag ctggtttggc cttagaatat 1440
263 ggtgcttcca ccgaagacat ttcaagaaca tgtcatgctc atccaacttt atctgaagct 1500
264 ttcaaggaag ctgctttggc caccttttgat aagccaatca acttttaaaa gtgatactga 1560
265 atacaacagt aatgaaaagt aaatactaaa ataatttgat ttgatttttt ttacttttt 1620
266 ttcactcttt tgctctcatt tttaaggtta tctaaatact gaattatctg agccatataa 1680
267 gacaatcaca tctatacata aatacacaaa taataacaca tatatattta ttttgaaaaa 1740
268 aaaaaaaaaa                                                      1750
270 <210> SEQ ID NO: 8
271 <211> LENGTH: 721
272 <212> TYPE: DNA
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RAW SEQUENCE LISTING DATE: 11/19/2001
PATENT APPLICATION: US/09/987,190 TIME: 11:12:00

Input Set : A:\1422-0502P.ST25.txt
Output Set: N:\CRF3\11192001\I987190.raw

273 <213> ORGANISM: Candida albicans
275 <400> SEQUENCE: 8
276 gccactgaac cgtacatcac aggacaaatg aacgaaattc actacactaa acatcaccaa 60
277 acttatgtta acaaccttaa tgcttcaatt gaacaagccg ttgaagccaa atctaaaggt 120
278 gaagttaaaa aattggttgc cttacaaaaa gccatcaatt tcaacggtgg tggttacctc 180
279 aatcattgtt tgtggtggaa aaacttggct cctgtctctc acggtggtgg tcaaccacca 240
280 agtgaagatt ccaaattagg taaacaaatc gtcaaacaat ttggttcttt ggataaattg 300
281 attgaaatca ccaatggcaa attggctggt attcaaggtt ctggatgggc ttttattgtt 360
282 aaaaacaaag ccaatggtga tactattgat gtcatcacca ctgctaacca agatactgtt 420
283 actgatctaa acttggttcc attgattgct attgatgctt ggaaacatgc ttattatttg 480
284 caataccaaa atgttaaagc tgattacttc aagaaccttt ggcatgttat caactggaag 540
285 gaagctgaaa gaagatttga attttaagtt actggacaaa agtcaagtac atatttaaat 600
286 ccaatattag aaaataaaag agttacttcc gatagtgctg attttgttta atatttcccc 660
287 attgtatata agtatatatg caagaatata ttcctgattg tgatgtaaaa aaaaaaaaaa 720
288 a 721
290 <210> SEQ ID NO: 9
291 <211> LENGTH: 23
292 <212> TYPE: DNA
293 <213> ORGANISM: Artificial Sequence
295 <220> FEATURE:
296 <221> NAME/KEY: modified_base
297 <222> LOCATION: (3)
298 <223> OTHER INFORMATION: i
300 <220> FEATURE:
301 <221> NAME/KEY: modified_base
302 <222> LOCATION: (9)
303 <223> OTHER INFORMATION: i
305 <220> FEATURE:
306 <221> NAME/KEY: modified_base
307 <222> LOCATION: (12)
308 <223> OTHER INFORMATION: i
310 <220> FEATURE:
311 <221> NAME/KEY: modified_base
312 <222> LOCATION: (15)
313 <223> OTHER INFORMATION: i
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA
318 <400> SEQUENCE: 9
W--> 319 **ggntaygtng cngcnathaa rgc** 23
321 <210> SEQ ID NO: 10
322 <211> LENGTH: 23
323 <212> TYPE: DNA
324 <213> ORGANISM: Artificial Sequence
326 <220> FEATURE:
327 <221> NAME/KEY: modified_base
328 <222> LOCATION: (6)
329 <223> OTHER INFORMATION: i
331 <220> FEATURE:
332 <221> NAME/KEY: modified_base

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY DATE: 11/19/2001
PATENT APPLICATION: **US/09/987,190** TIME: 11:12:01

Input Set : **A:\1422-0502P.ST25.txt**
Output Set: **N:\CRF3\11192001\I987190.raw**

L:12 M:270 C: Current Application Number differs, Replaced Current Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:39 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:42 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:60 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:319 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:345 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12